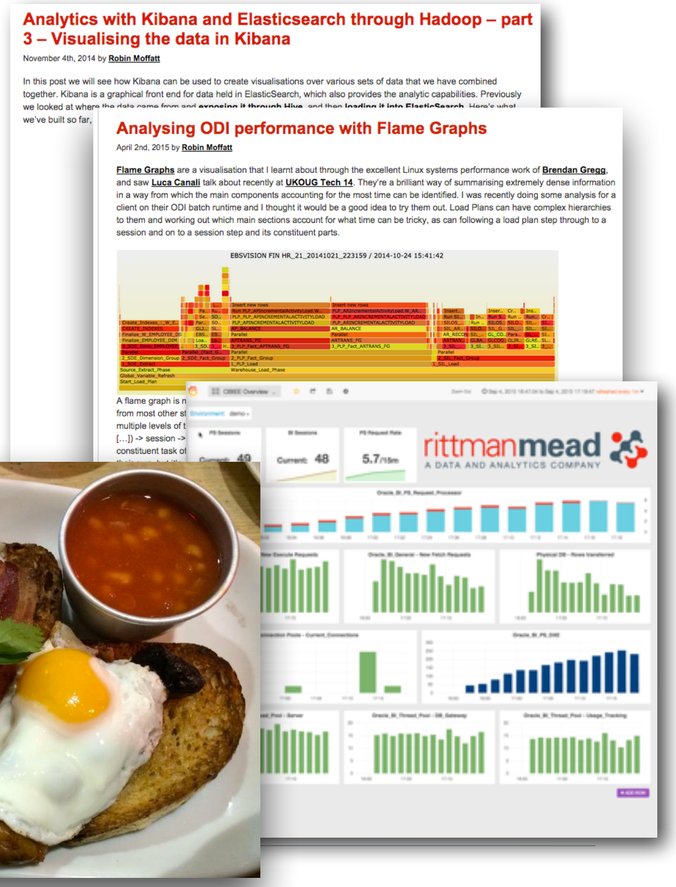
User Adoption and Retention in OBIEE for the IT department

Robin Moffatt, Principal Consultant, Rittman Mead | UKOUG 2015

Robin Moffatt

- Principal Consultant with Rittman Mead
  - OBIEE & ODI / SysAdmin / Performance
- Previously …
  - OBIEE/DW developer at large UK retailer
  - SQL Server DBA, BusinessObjects, DB2, COBOL….

ORACLE ACE



- Blog: **http://ritt.md/rmoff**
- Twitter: **@rmoff**
- IRC: **rmoff** / #obihackers / freenode

About Rittman Mead

Optimizing your investment in Oracle Business Analytics

- World's leading specialist partner for technical excellence, solutions delivery and innovation in Oracle Data Integration, Business Intelligence, Analytics and Big Data
- 70+ consultants worldwide including 1 Oracle ACE Director and 2 Oracle ACEs
- Providing our customers targeted expertise; we are a company that doesn't try to do everything… only what we excel at
- Founded on the values of collaboration, learning, integrity and getting things done
- Comprehensive service portfolio designed to support the full lifecycle of any analytics solution

A System is Nothing Without its Users

- We need to **ENGAGE** users and we need to **RETAIN** users

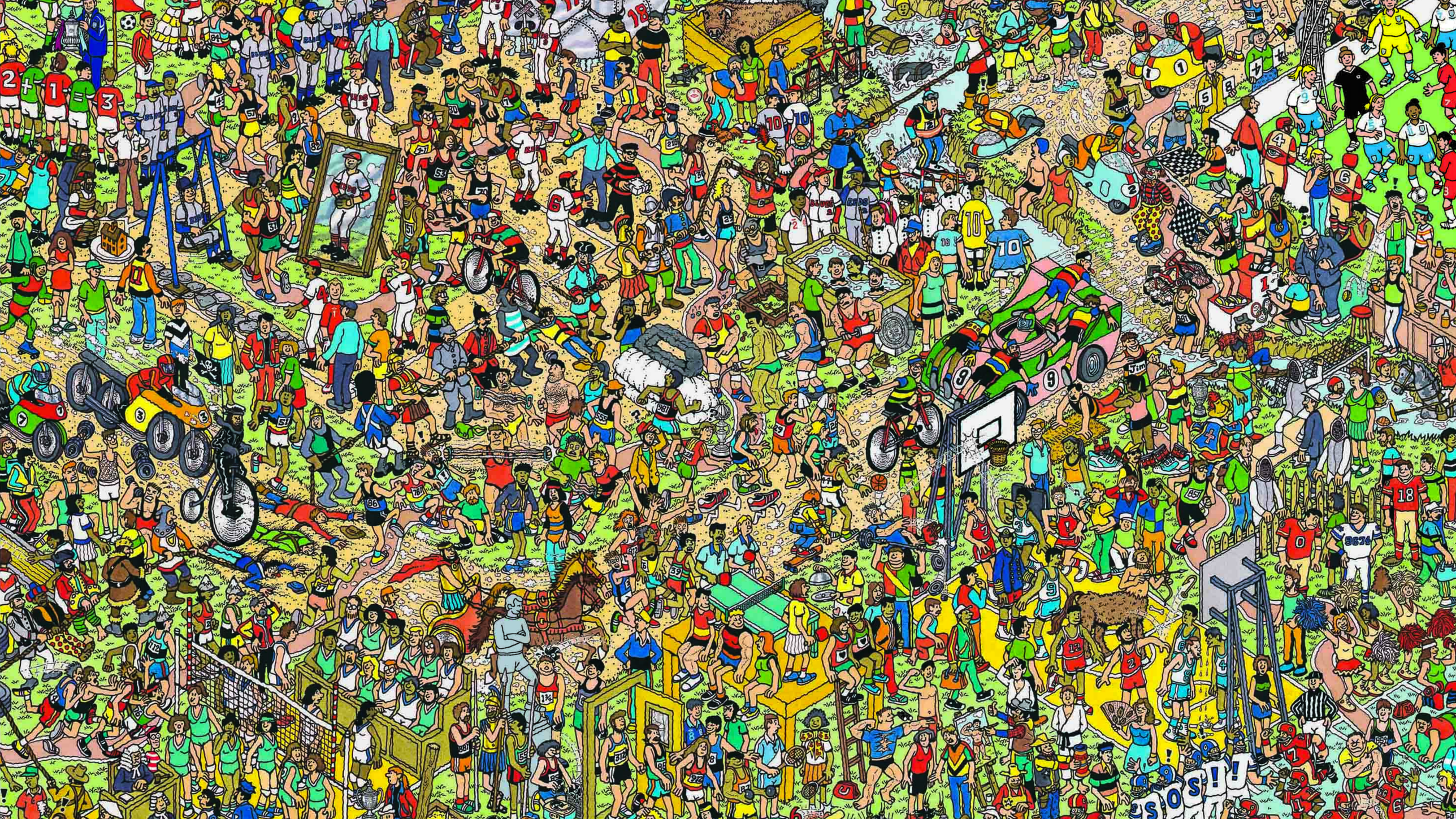
- **How do we do that?**

- **How do monitor if we are doing it well enough?**

How Do We Engage and Retain Users?

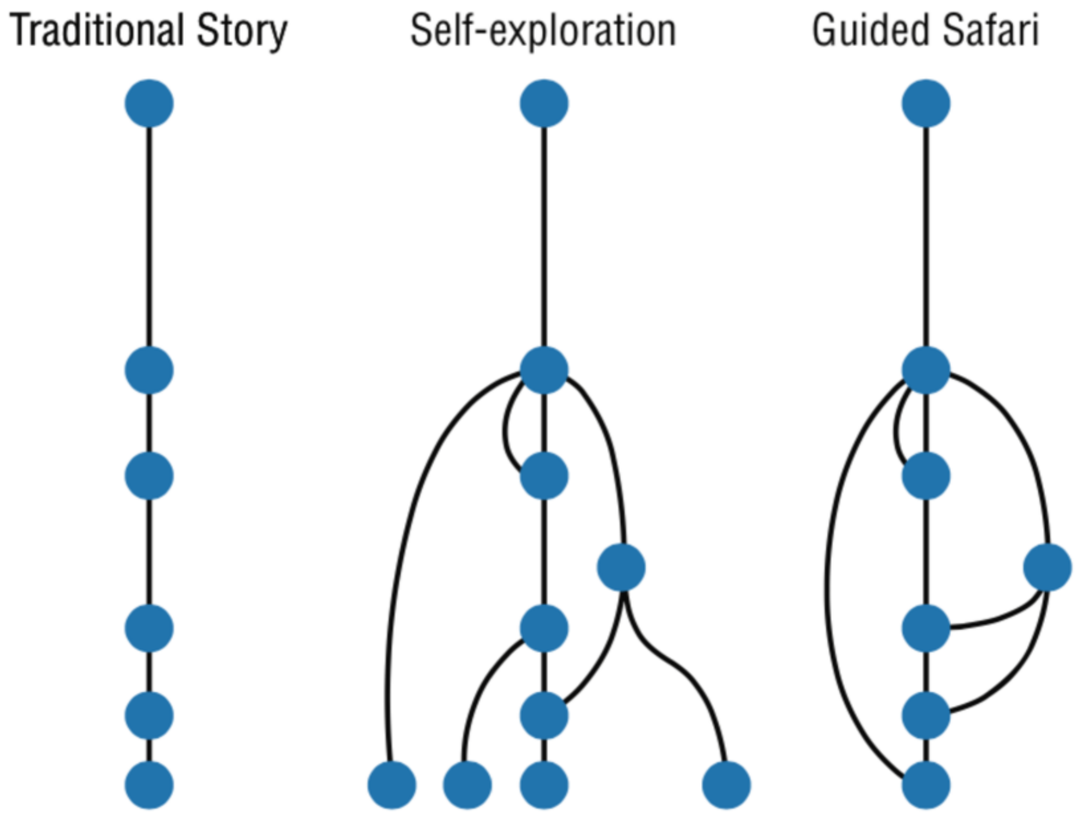
- Data
  - Accurate
  - Available and Relevant
  - Timely

- Accessibility
  - Intuitive Navigation
  - Good Response Times
  - Right Place & Right Time



Intuitive Navigation

Guided Navigation



source: Data Fluency

Measuring User Engagement and Adoption

- **Frequency** - Ratio of Daily Active Users (DAU) to Monthly Active Users (MAU)

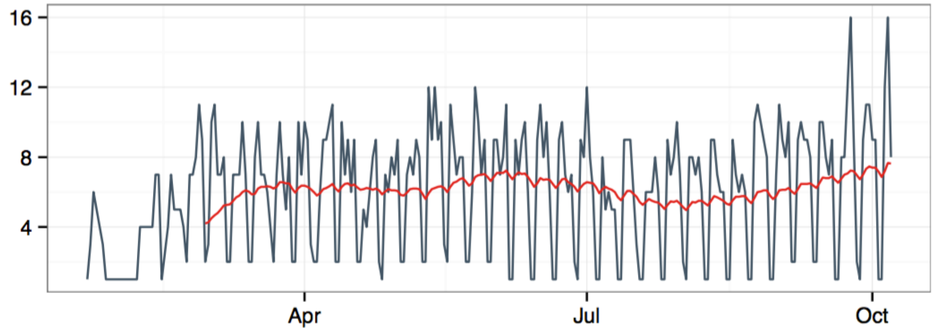


Figure 4: DAU (blue) with trailing 30-day average (red)

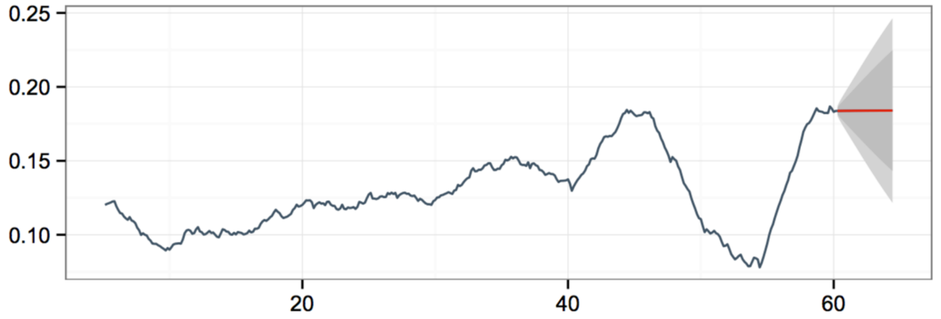
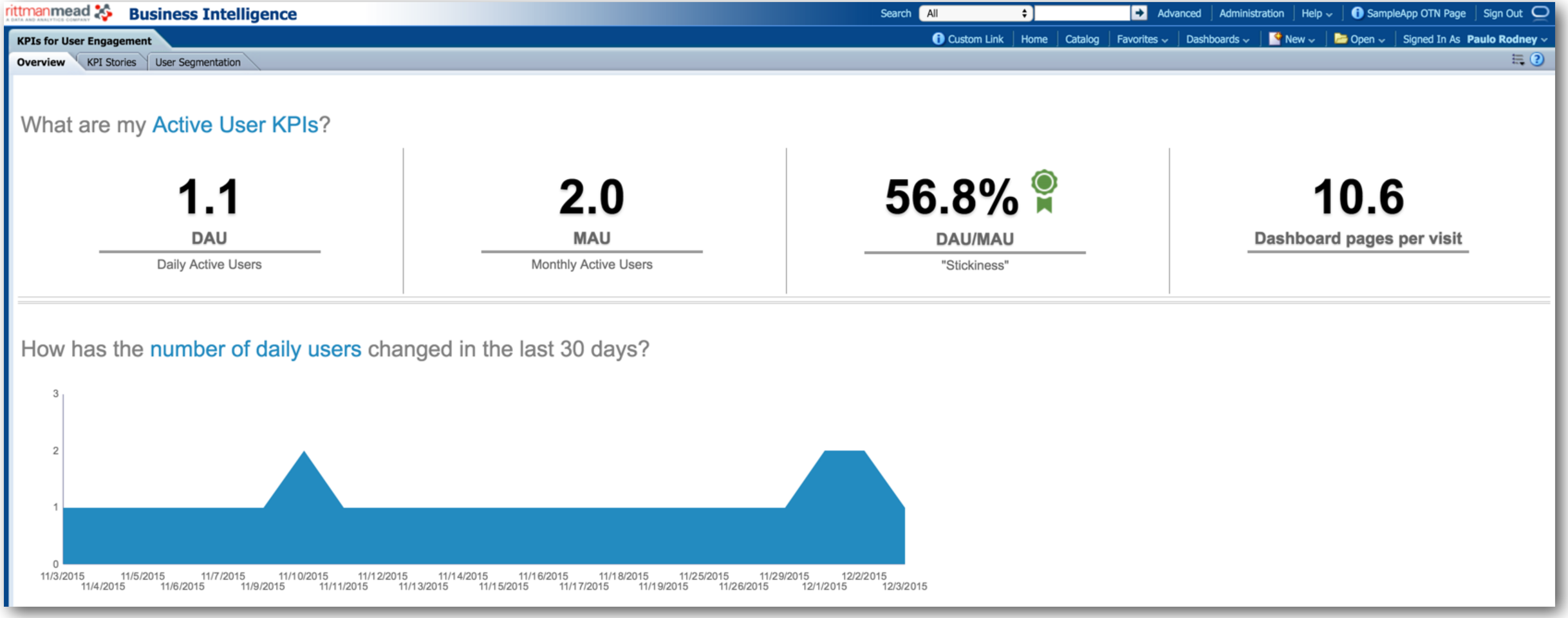


Figure 6: Forcasted DAU/MAU for 30 days after the data was generated

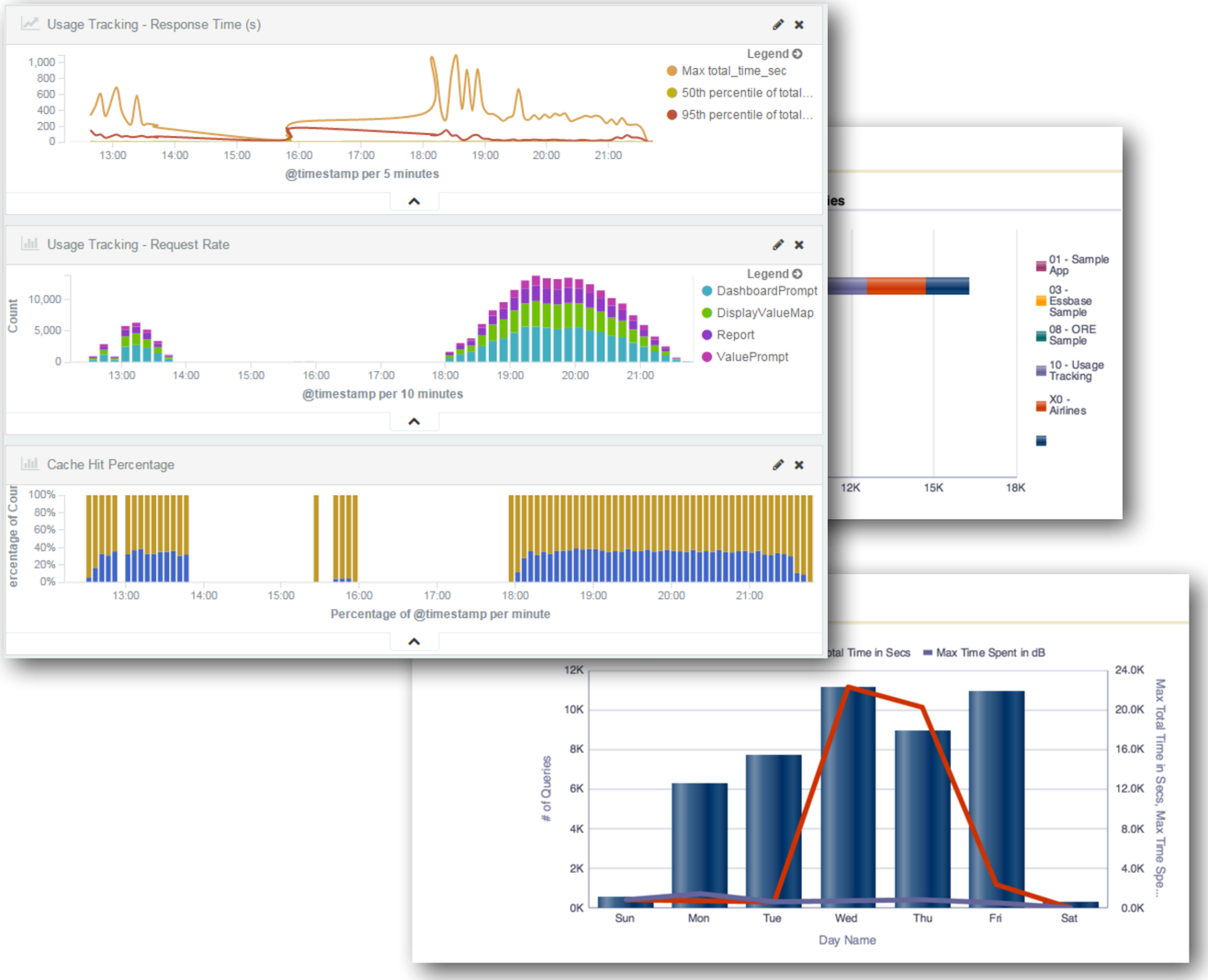
- **Adoption** - proportion of those with access to OBI who use it

Measuring User Engagement



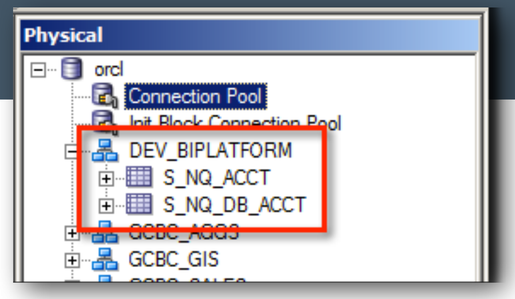
Usage Tracking is a gold mine!

- Monitor
  - User Engagement levels
  - Usage patterns
  - System Performance
  - Unused Dashboards

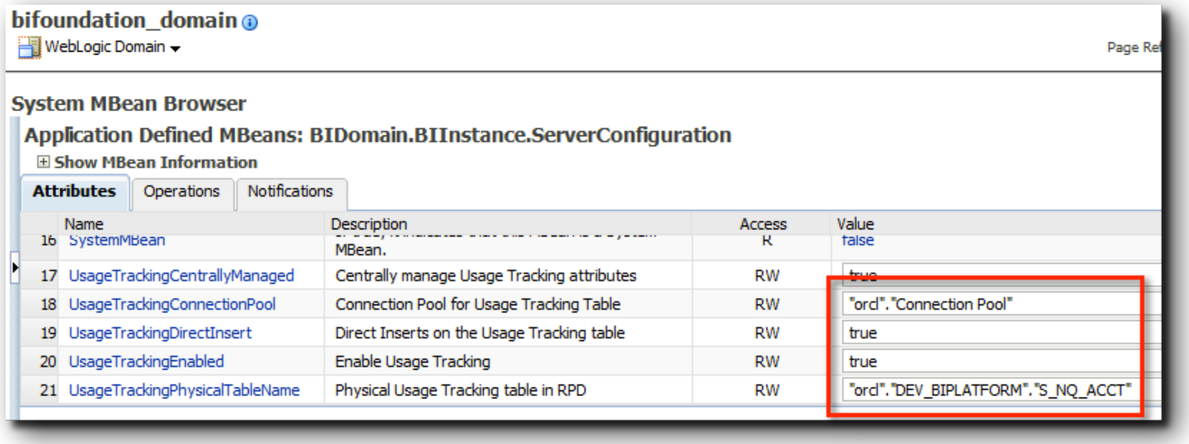


DO IT
DO IT NOW!

Enabling Usage Tracking

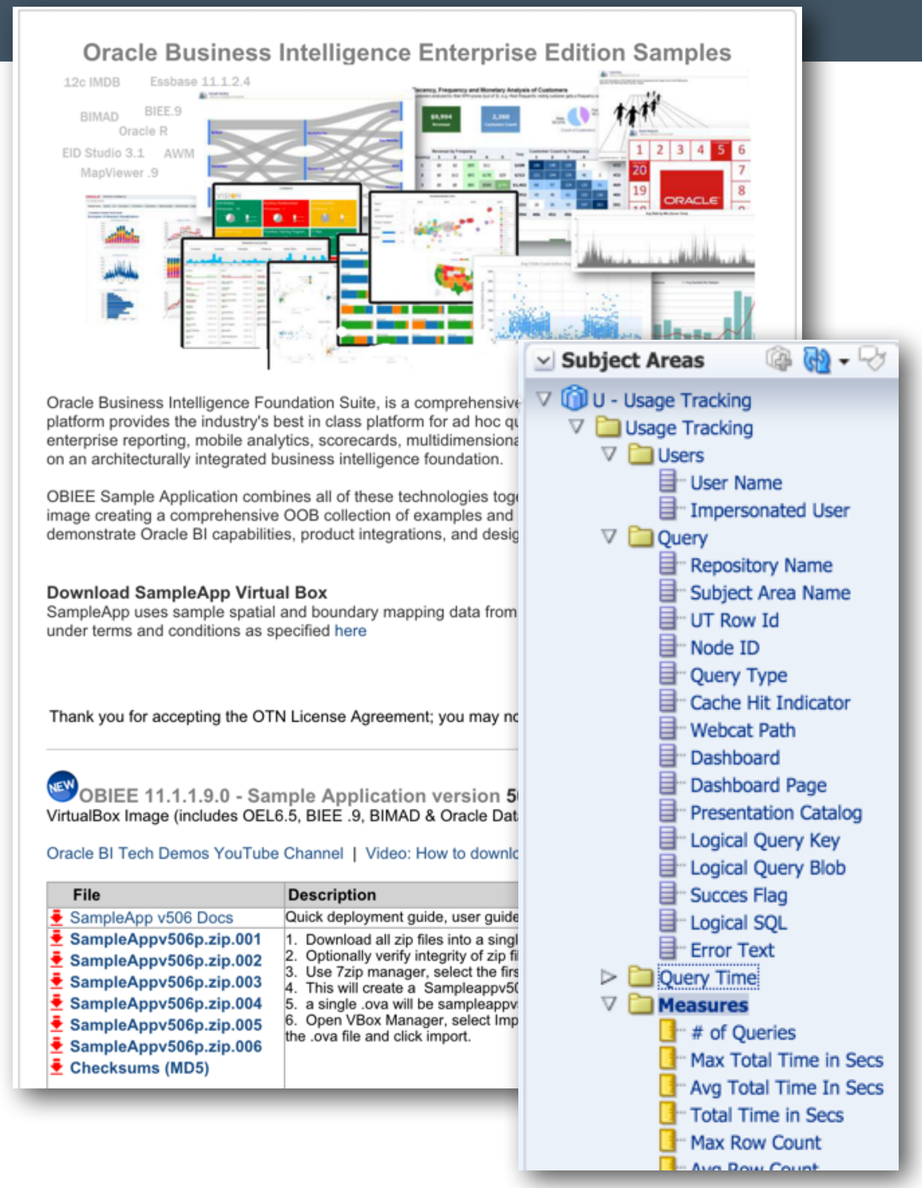


1. Import the tables to the RPD physical layer
   - *The tables S_NQ_ACCT & S_NQ_DB_ACCT that hold Usage Tracking data were created at installation time by the RCU tool (BIPLATFORM)*
2. Add connection pool with R/W user
3. Update MBeans to point to tables/connection pool in RPD
4. Restart BI Server
5. Check nqserver.log for errors
6. Rinse & Repeat until it works…



SampleApp - thank you Oracle!

- Free download from Oracle
- Fully provisioned virtual machine with whole OBIEE stack (and more)
- Massive RPD and set of dashboards
- **Pre-built Usage Tracking model + reports**
- Lots of other goodies too!



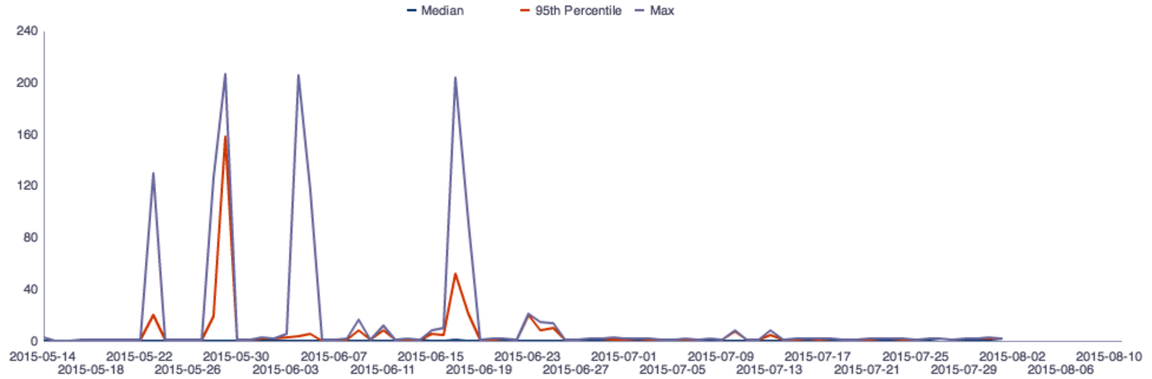
Monitoring Performance

Overview | Usage Detail

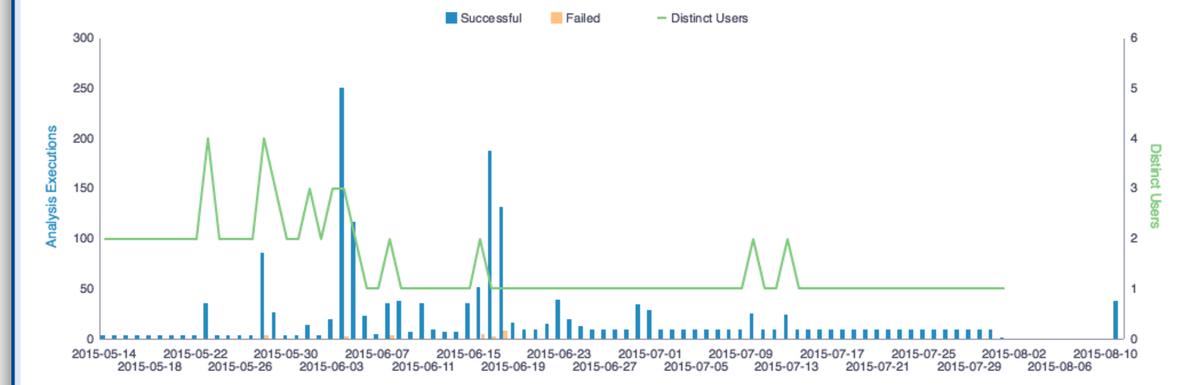
What are the number of views and response time statistics by dashboard?

Dashboard Name	Number of views	Response Time				
		Cumulative	StdDev	Median	95th Percentile	Maximum
Industry/page 1	2	413	1	207	207	207
Resource/Overview	1	13	0	13	13	13
Time Entry/page 1	1	11	0	11	11	11
KPIs for User Engagement/KPI Stories	194	3505	34	8	53	206
Resource/Staff	3	57	26	7	45	49
Performance/Performance	3	16	2	4	8	8

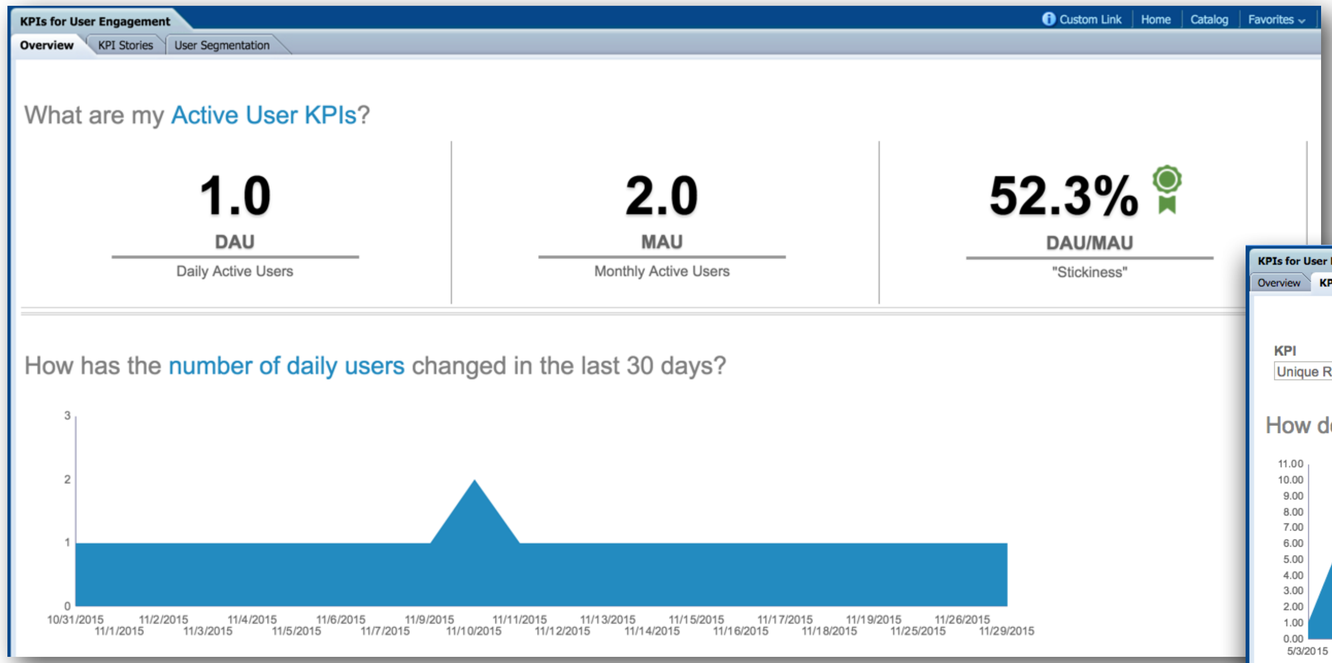
What is the maximum, median, and 95th percentile response time (sec) over the last 90 days?

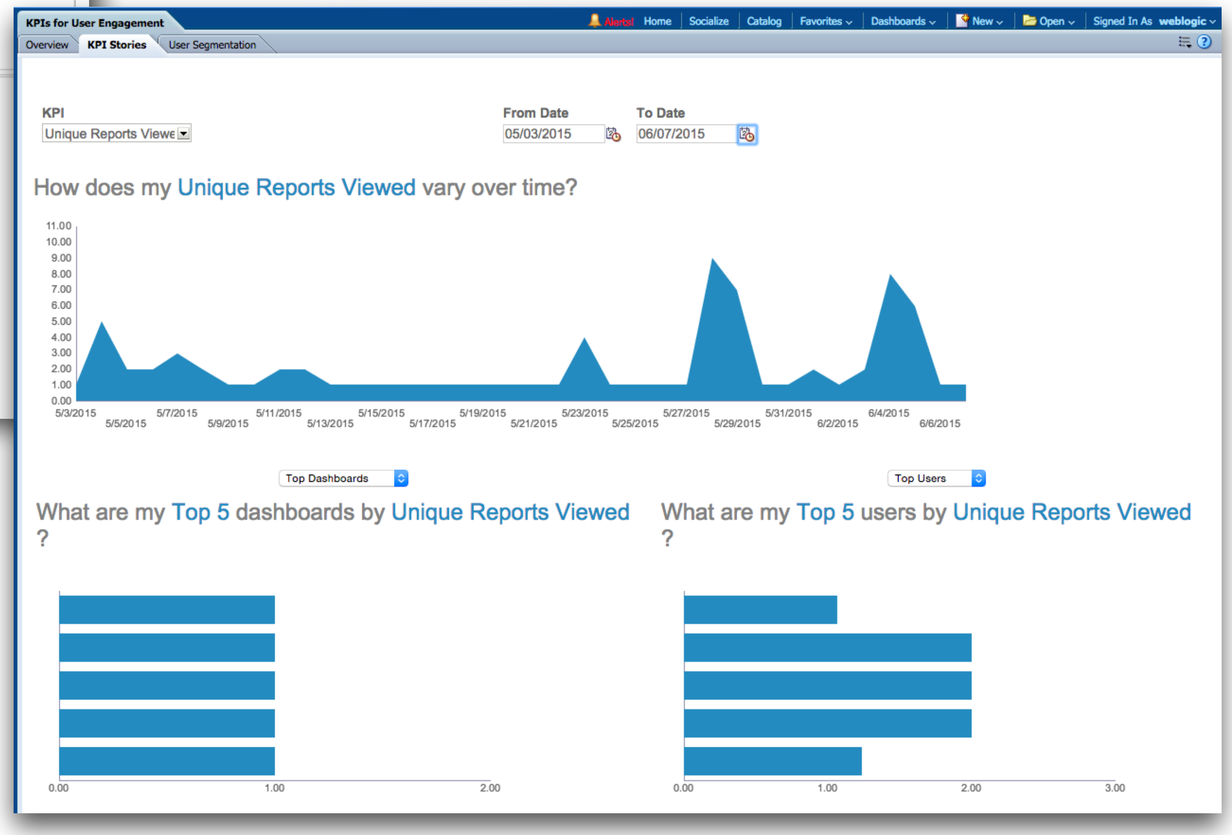


How many analyses were executed and by how many distinct users, over the last 90 days?



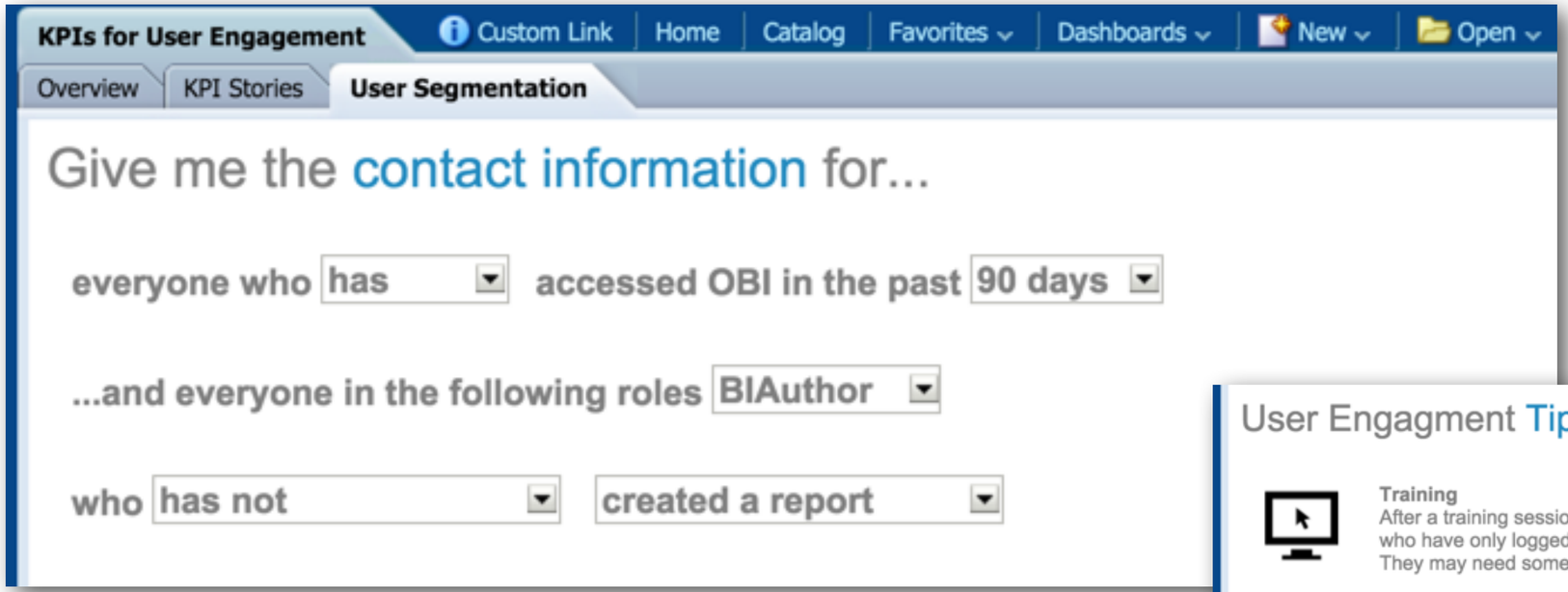
Measuring User Engagement





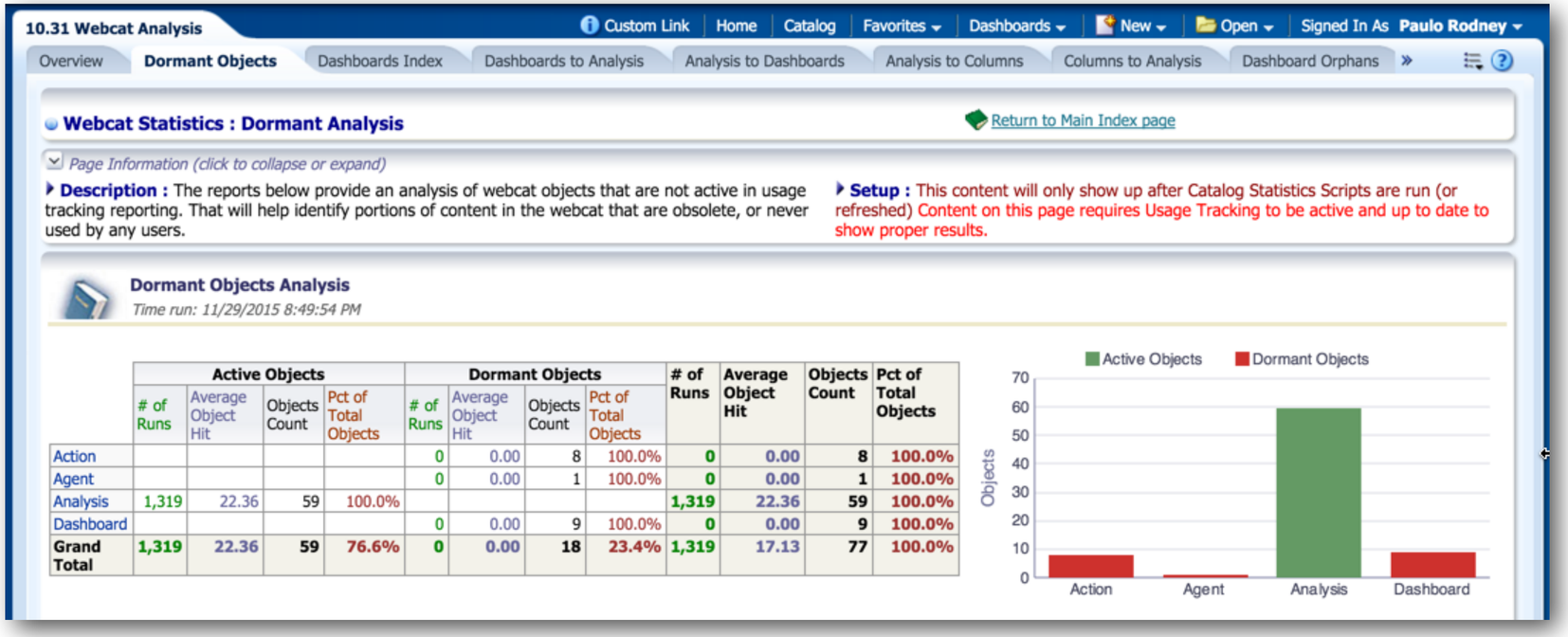
User Re-Engagement

- The data's there - use it!



Does Anyone Really Use the Widget Report Anyway?

- Identify stale dashboards
- Use the WebCat Utils from SampleApp for visibility of full catalog



Do You Have a “Shadow Army” of Reports?

- You have a set of dashboards for users to access
  - You may even have a report catalog and governance process
- …but your users want **their** copy of it!

- Inefficient for users
- Big support overhead
- A right PITA at upgrade time!

Performance

- Performance is not Oracle database cache hit ratios and tuning configuration parameters
- Performance is the **response time** and **variance** as experienced by the users at their desks

Monitoring Performance

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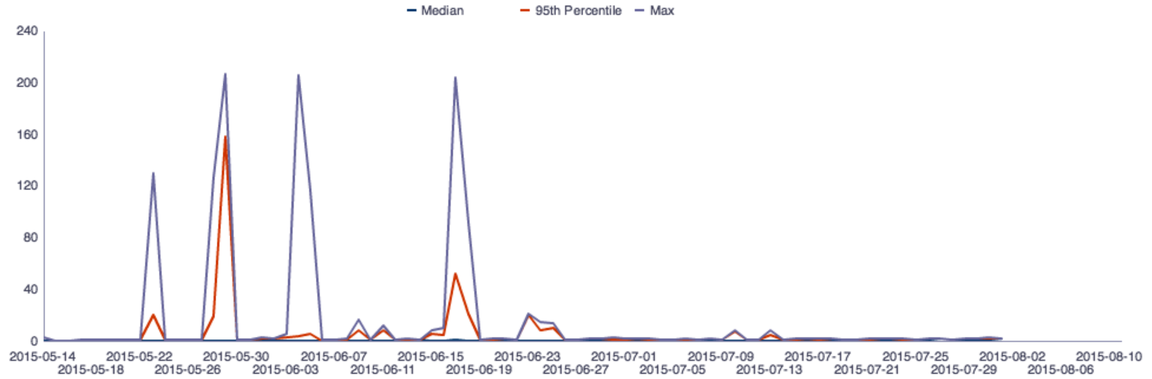

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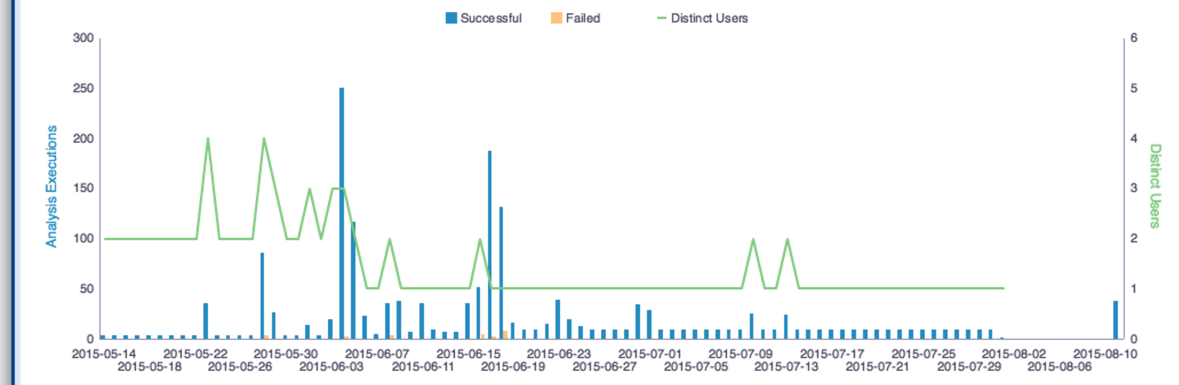
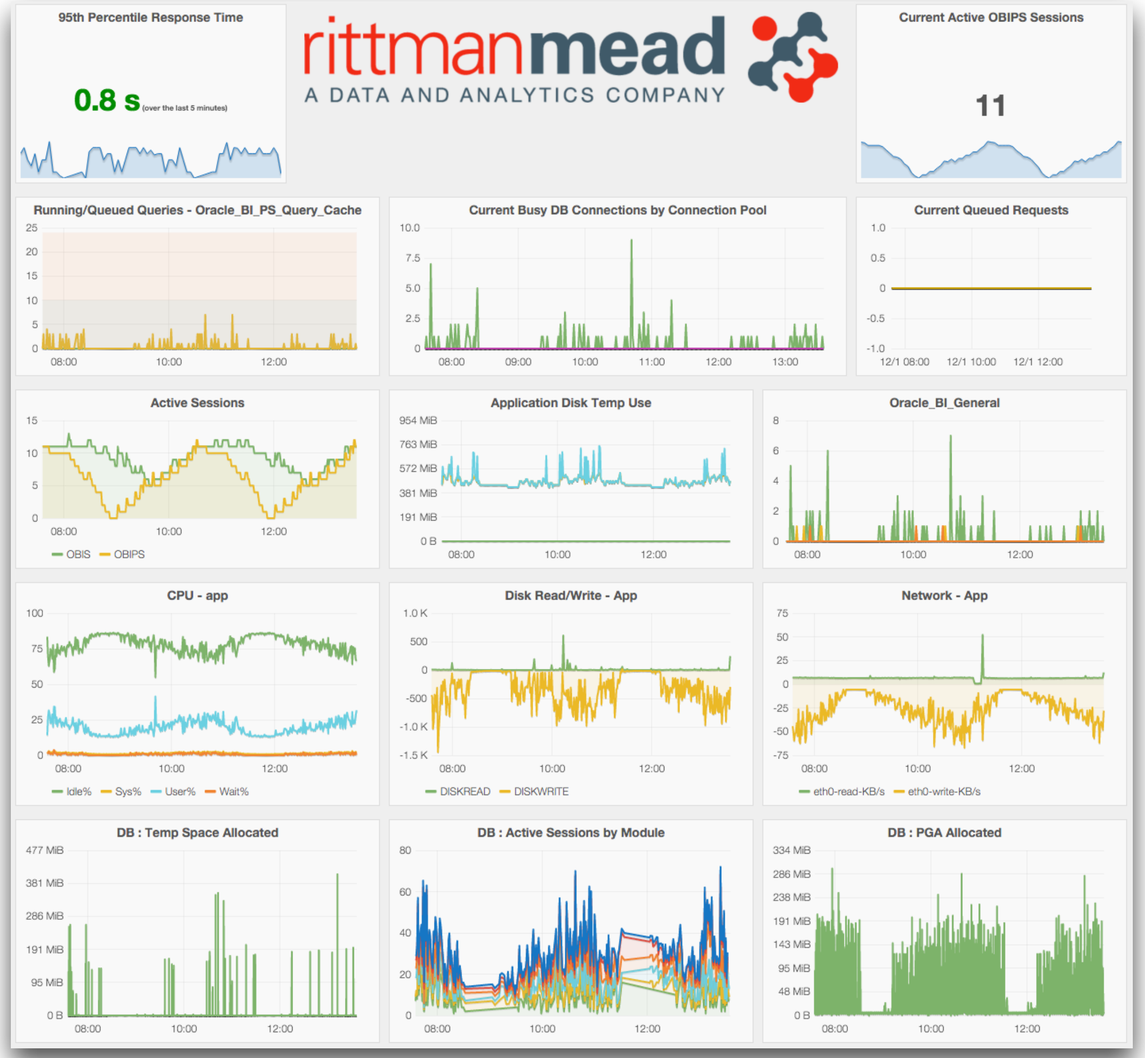


Performance Analytics Dashboards

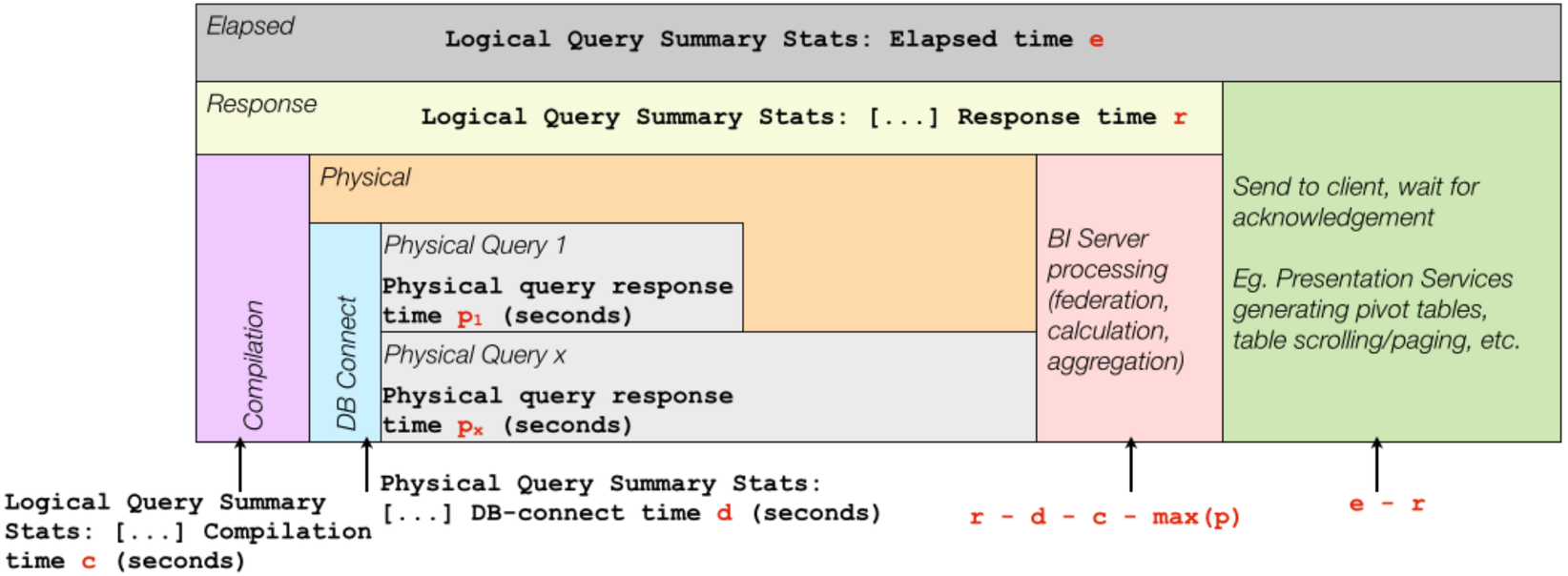
- Monitor and Troubleshoot performance problems
- Interactive dashboards for rapid analysis
- Holistic view of OBIEE in one place

  - Response Times
  - Cache usage
  - Temporary file usage
  - Database metrics (ASH)
  - OS metrics



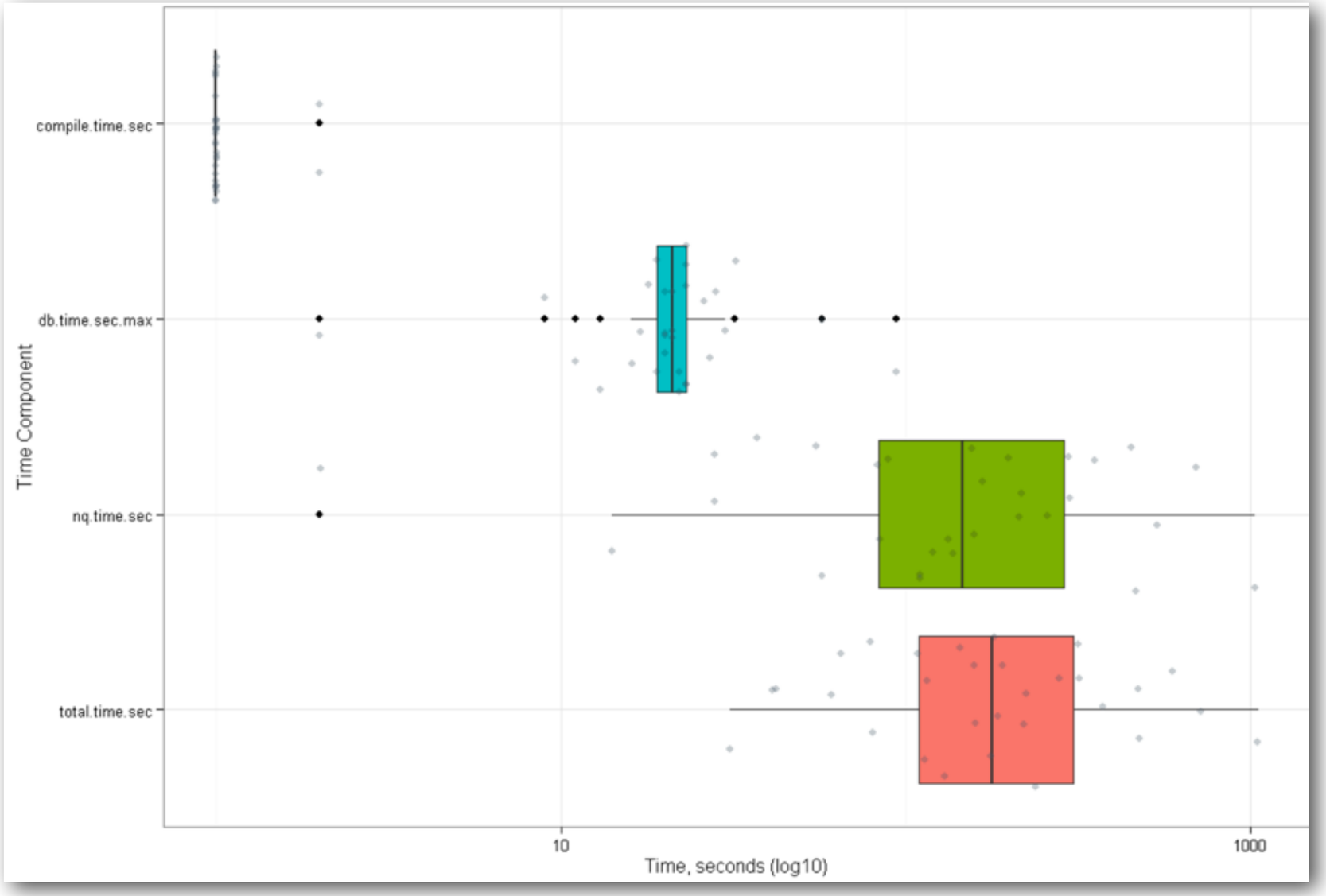
Why's My Report Slow?

- **WHERE'S** my report slow:

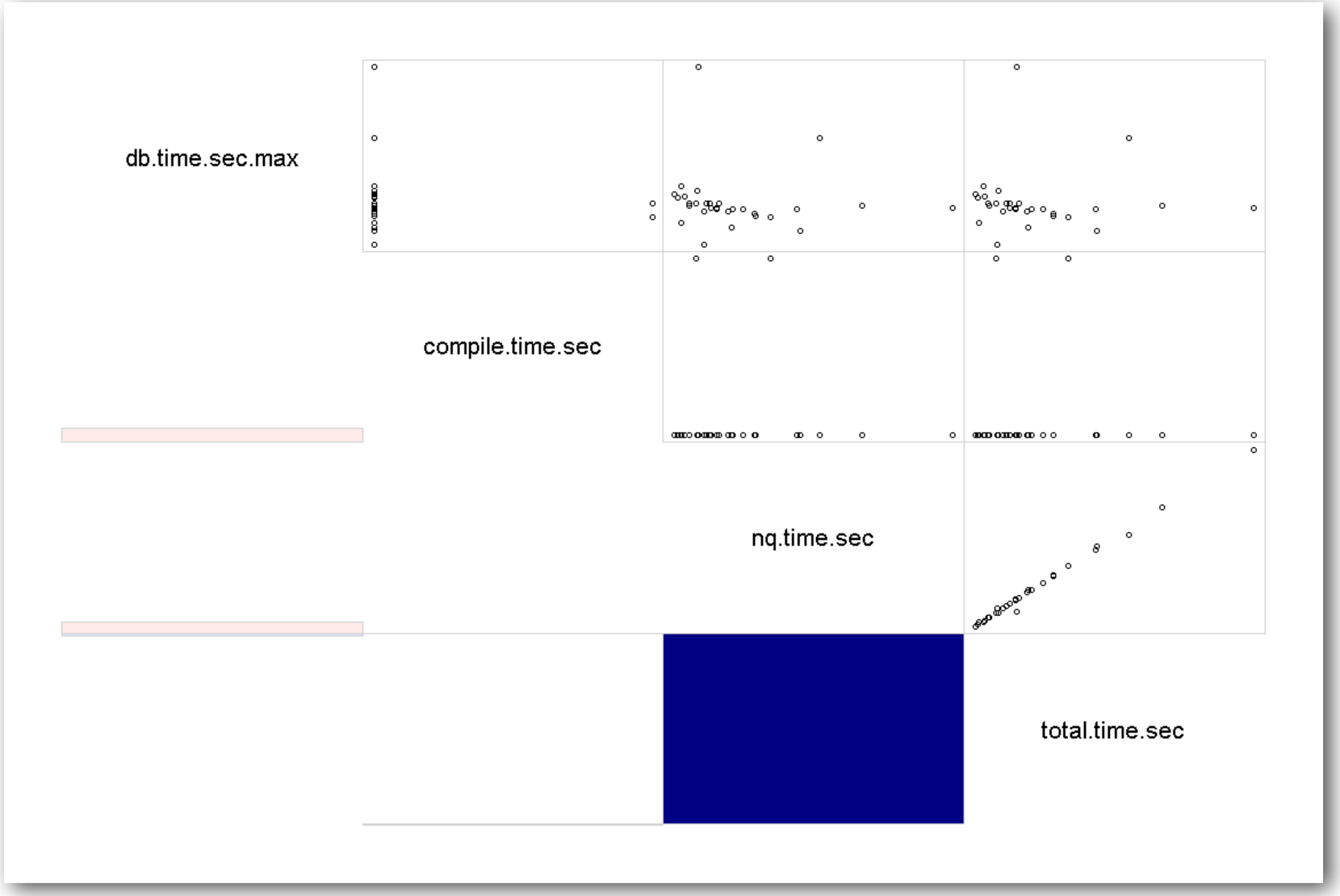


- http://ritt.md/silver-bullets-slides
- http://ritt.md/silver-bullets-video

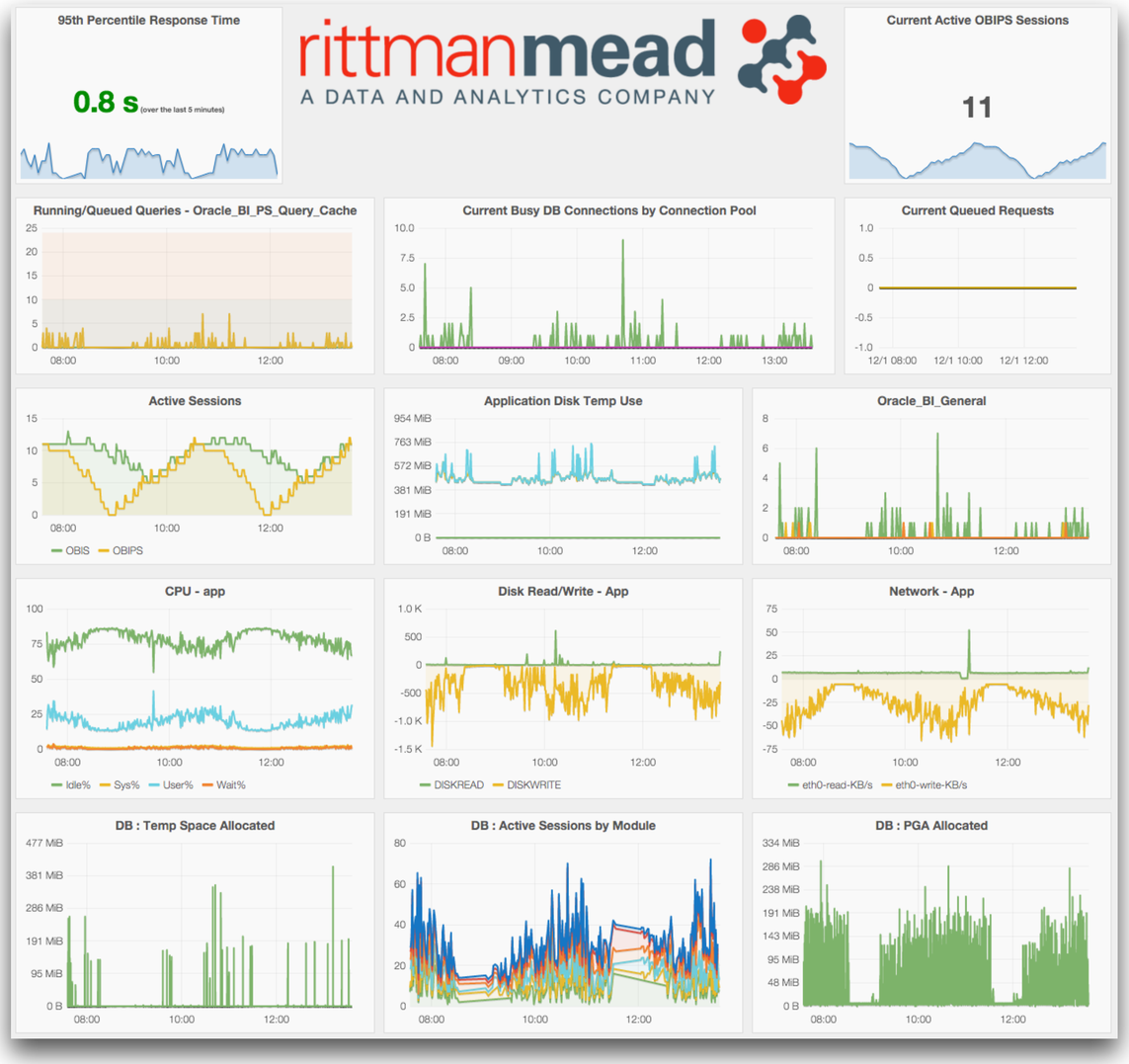
Performance Analytics

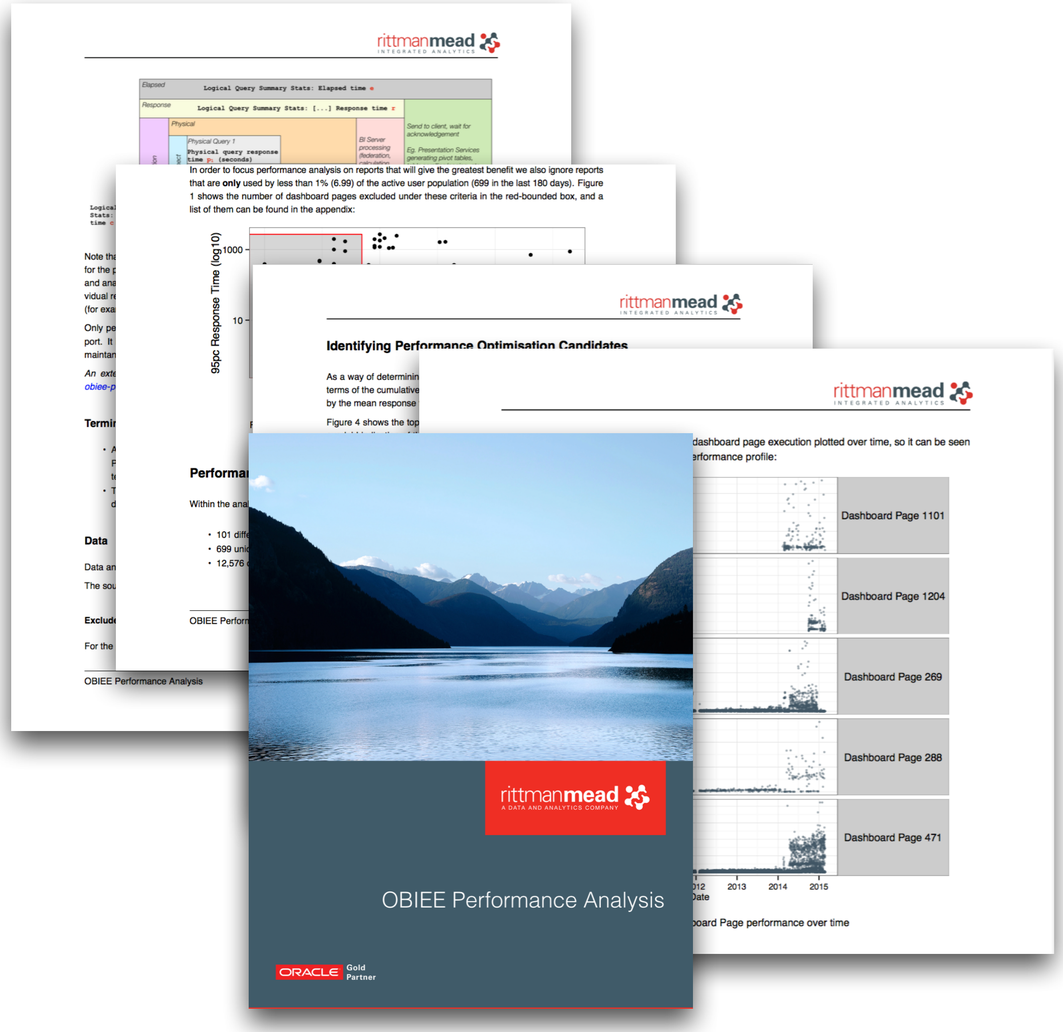


Performance Analytics



Rittman Mead Performance Analytics Service





User Engagement

Average user adoption for BI platforms is below 25%

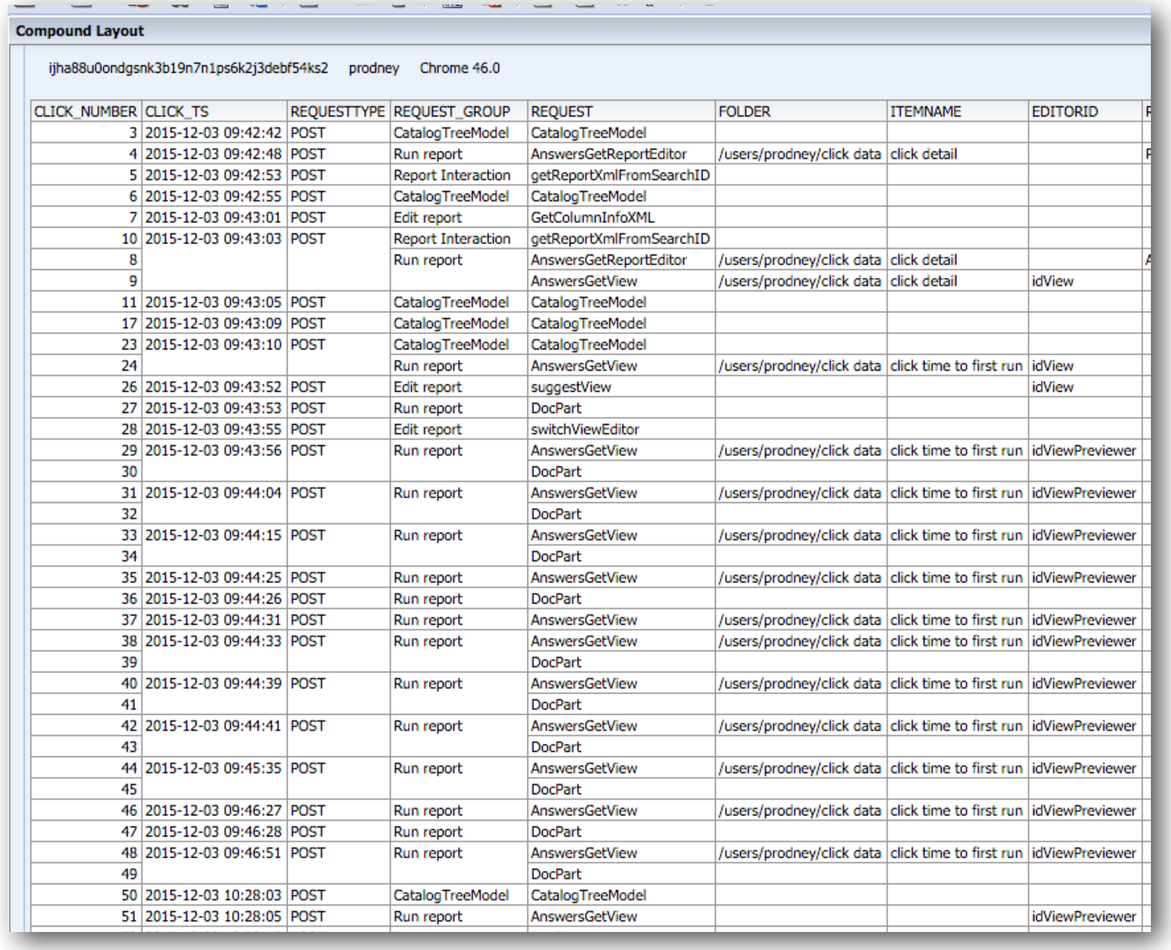
Rittman Mead's **User Engagement Service** can help

- Visual Redesign
- Business User Training
- Engagement Toolkit
- Ongoing Support

Source : http://www.biscorecard.com/bi-adoption-flat/ / https://www.gartner.com/doc/1712414/consumerization-bi-drives-greater-adoption

OBIEE Click Stream Data

- Usage Tracking is great, but it only captures interactions with the BI Server
- We have the capability to easily track **every interaction a user makes with OBIEE**
- Native OBIEE capability, minimal overhead



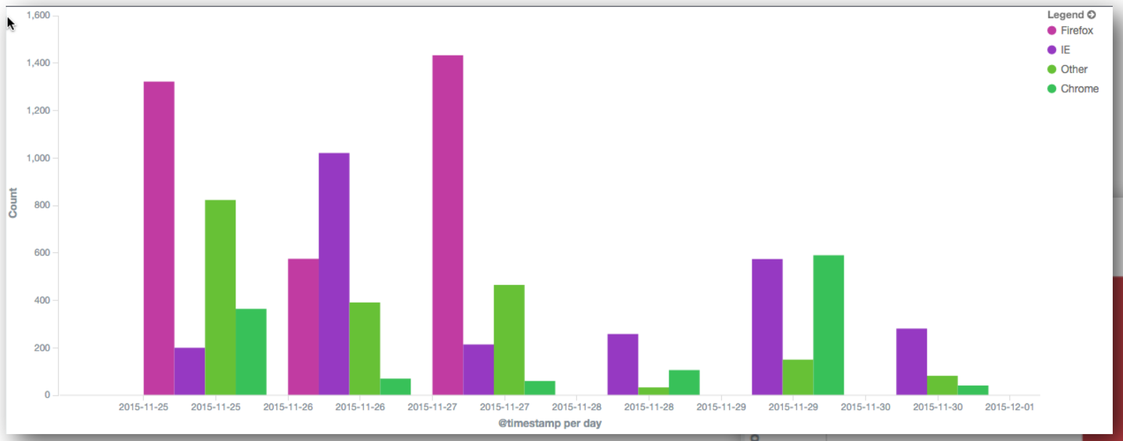
Compound Layout

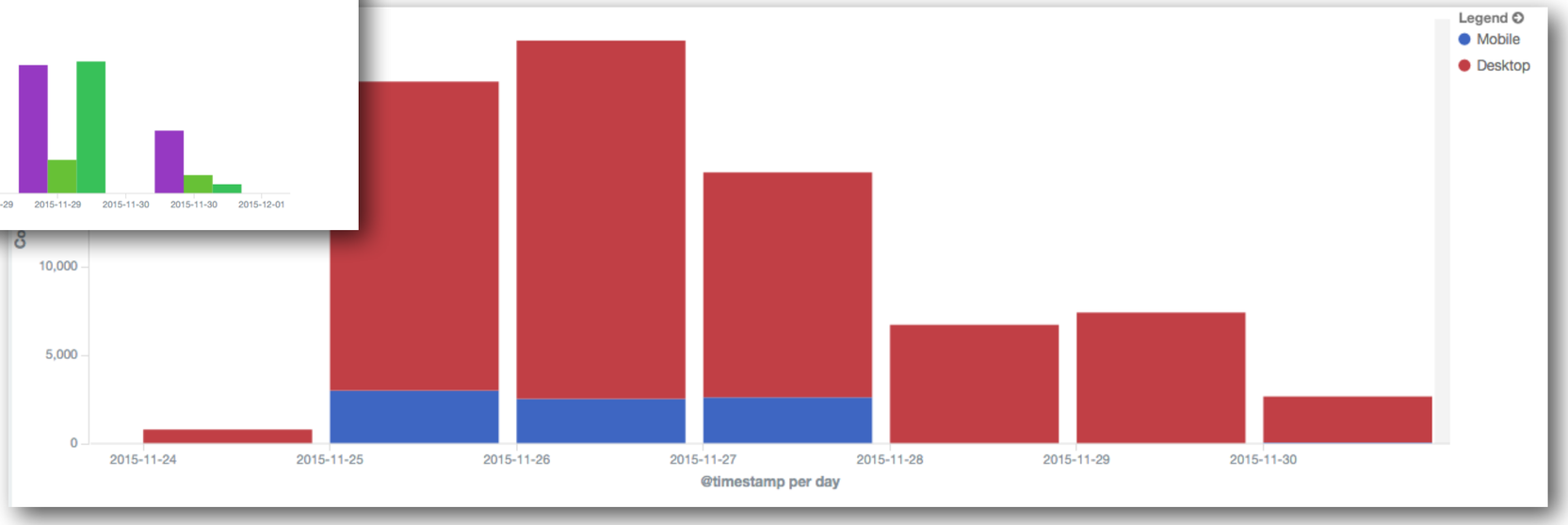
ijha88u0ondgsnk3b19n7n1ps6k2j3debf54ks2 prodney Chrome 46.0

CLICK_NUMBER	CLICK_TS	REQUESTTYPE	REQUEST_GROUP	REQUEST	FOLDER	ITEMNAME	EDITORID
3	2015-12-03 09:42:42	POST	CatalogTreeModel	CatalogTreeModel			
4	2015-12-03 09:42:48	POST	Run report	AnswersGetReportEditor	/users/prodney/click data	click detail	
5	2015-12-03 09:42:53	POST	Report Interaction	getReportXmlFromSearchID			
6	2015-12-03 09:42:55	POST	CatalogTreeModel	CatalogTreeModel			
7	2015-12-03 09:43:01	POST	Edit report	GetColumnInfoXML			
10	2015-12-03 09:43:03	POST	Report Interaction	getReportXmlFromSearchID			
8			Run report	AnswersGetReportEditor	/users/prodney/click data	click detail	
9				AnswersGetView	/users/prodney/click data	click detail	idView
11	2015-12-03 09:43:05	POST	CatalogTreeModel	CatalogTreeModel			
17	2015-12-03 09:43:09	POST	CatalogTreeModel	CatalogTreeModel			
23	2015-12-03 09:43:10	POST	CatalogTreeModel	CatalogTreeModel			
24			Run report	AnswersGetView	/users/prodney/click data	click time to first run	idView
26	2015-12-03 09:43:52	POST	Edit report	suggestView			idView
27	2015-12-03 09:43:53	POST	Run report	DocPart			
28	2015-12-03 09:43:55	POST	Edit report	switchViewEditor			
29	2015-12-03 09:43:56	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
30				DocPart			
31	2015-12-03 09:44:04	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
32				DocPart			
33	2015-12-03 09:44:15	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
34				DocPart			
35	2015-12-03 09:44:25	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
36	2015-12-03 09:44:26	POST	Run report	DocPart			
37	2015-12-03 09:44:31	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
38	2015-12-03 09:44:33	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
39				DocPart			
40	2015-12-03 09:44:39	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
41				DocPart			
42	2015-12-03 09:44:41	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
43				DocPart			
44	2015-12-03 09:45:35	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
45				DocPart			
46	2015-12-03 09:46:27	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
47	2015-12-03 09:46:28	POST	Run report	DocPart			
48	2015-12-03 09:46:51	POST	Run report	AnswersGetView	/users/prodney/click data	click time to first run	idViewPreviewer
49				DocPart			
50	2015-12-03 10:28:03	POST	CatalogTreeModel	CatalogTreeModel			
51	2015-12-03 10:28:05	POST	Run report	AnswersGetView			idViewPreviewer

OBIEE Click Data Analysis

- Which browsers are my users using? Are they using Desktop or Mobile?





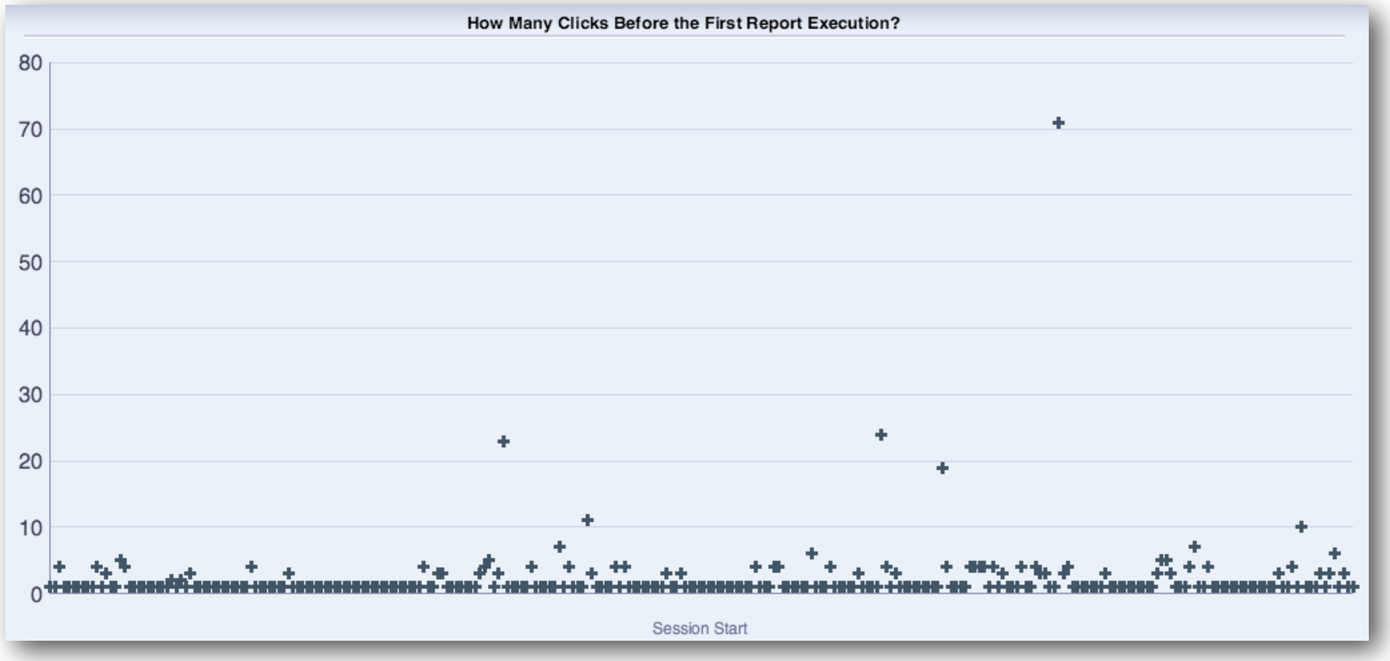
OBIEE Click Stream Data Analysis

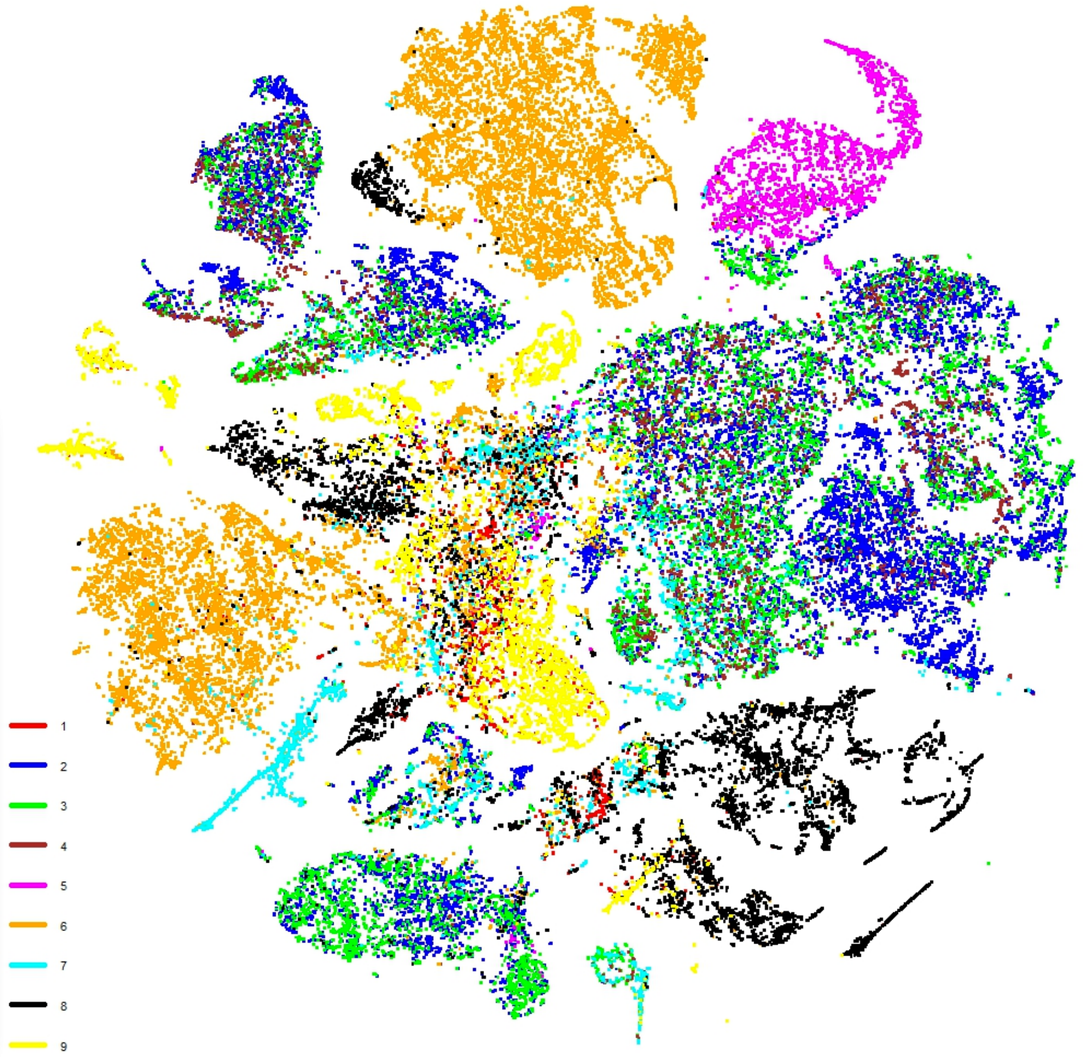
- How often do users export data? From which reports? To what format?

SAW_USER	SESSIONID	Click #	Click Time	REQUESTTYPE	REQUEST_GROUP	REQUEST	ITEMNAME
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	76	2015-12-03 07:20:01	POST	Download/Export	DownloadJobStatus	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	81	2015-12-03 07:20:01	GET	Download/Export	downloadExcelFile	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	80	2015-12-03 07:20:01	POST	Download/Export	DownloadJobStatus	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	79	2015-12-03 07:20:01	GET	Download/Export	downloadExcelFile	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	78	2015-12-03 07:20:01	POST	Download/Export	DownloadJobStatus	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	77	2015-12-03 07:20:01	GET	Download/Export	downloadExcelFile	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	75	2015-12-03 07:20:00	POST	Download/Export	Go	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	74	2015-12-03 07:20:00	POST	Download/Export	Go	
	aivqb5ob2s967u9j9it4m4oiohjot7bl4th6slq	73	2015-12-03 07:20:00	POST	Download/Export	Go	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	145	2015-12-03 06:08:38	POST	Download/Export	DownloadJobStatus	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	150	2015-12-03 06:08:38	GET	Download/Export	downloadExcelFile	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	149	2015-12-03 06:08:38	POST	Download/Export	DownloadJobStatus	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	148	2015-12-03 06:08:38	GET	Download/Export	downloadExcelFile	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	147	2015-12-03 06:08:38	POST	Download/Export	DownloadJobStatus	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	146	2015-12-03 06:08:38	GET	Download/Export	downloadExcelFile	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	139	2015-12-03 06:08:37	POST	Download/Export	Go	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	144	2015-12-03 06:08:37	POST	Download/Export	DownloadJobStatus	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	143	2015-12-03 06:08:37	POST	Download/Export	Go	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	142	2015-12-03 06:08:37	POST	Download/Export	DownloadJobStatus	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	141	2015-12-03 06:08:37	POST	Download/Export	Go	
	blt3jsh1doboenqll3lpe7gvnas709s3h951fqi	140	2015-12-03 06:08:37	POST	Download/Export	DownloadJobStatus	
	16rsvp0etlgj0v9mcouccea4t1rph33gh2g3cl2	163	2015-12-02 21:27:34	POST	Download/Export	DownloadJobStatus	
	16rsvp0etlgj0v9mcouccea4t1rph33gh2g3cl2	168	2015-12-02 21:27:34	GET	Download/Export	downloadExcelFile	
	16rsvp0etlgj0v9mcouccea4t1rph33gh2g3cl2	167	2015-12-02 21:27:34	POST	Download/Export	DownloadJobStatus	
	16rsvp0etlgj0v9mcouccea4t1rph33gh2g3cl2	166	2015-12-02 21:27:34	GET	Download/Export	downloadExcelFile	
	16rsvp0etlgj0v9mcouccea4t1rph33gh2g3cl2	165	2015-12-02 21:27:34	POST	Download/Export	DownloadJobStatus	

OBIEE Click Stream Data Analysis

- Segment users based on click patterns to identify those least likely to return to the system





#EOF

Rittman Mead
User Engagement Service
http://ritt.md/ue

Rittman Mead
Performance Analytics Service
http://ritt.md/pa

email

robin@rittmanmead.com

web

http://ritt.md/rmoff

twitter

@rmoff

irc

rmoff @ #obihackers